



# MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

Issue 27 November 2002

## **Technology Education**

**New Web Design** -- The Division of Vocational and Adult Education, including all program areas, has a new web design and have been reorganized. Check out our new format and be sure to reset your bookmarks. <a href="http://www.dese.state.mo.us/divvoced/index.htm">http://www.dese.state.mo.us/divvoced/index.htm</a>. You can find the Technology Education link in the right hand column of blue buttons titled "Technology Education".

Newly Revised Missouri Technology Education Guide – NOW AVAILABLE! This is a revision of the Missouri Industrial Technology Education Guide of 1991. The goal of the project was to preserve the quality and value of the 1991 document, as well as, to create a more user-friendly on-line tool that teachers and administrator can access on-line. You can view or download the newly revised MOTE Guide at <a href="http://www.dese.state.mo.us/divvoced/tech\_ed\_index.htm">http://www.dese.state.mo.us/divvoced/tech\_ed\_index.htm</a> and click on the green button labeled "Curriculum" then click on curriculum guides. If you have questions about the guide you can contact Doug Miller at <a href="mail.dese.state.mo.us">dmiller1@mail.dese.state.mo.us</a>.

**Alternative Certification** – In response to the growing teacher shortage, the State Board of Education recently approved a rule change authorizing a one-year renewable certificate. It is available for all areas of certification except Elementary 1-6, Early Childhood, Early Childhood Special Education, and administration. For more information go to: <a href="http://www.dese.state.mo.us/divteachqual/teachcert/tempauth.htm">http://www.dese.state.mo.us/divteachqual/teachcert/tempauth.htm</a>.

**Needing a Technology Education Teacher** – Please send the following information to <a href="mailto:dmiller1@mail.dese.state.mo.us">dmiller1@mail.dese.state.mo.us</a>:

Subject: Need a Teacher

District Name
District Contact Person Name
District Contact Phone Number and/or Email Address
Date Position Available
2 or 3 sentence description of the job opening

**Project Lead The Way** (PLTW) – We currently have 3 schools that have signed on to implement PLTW and 12 schools in the process of completing their school agreements with Project Lead The Way. For more information about PLTW go to: <a href="https://www.pltw.org">www.pltw.org</a>.



**TEAM Membership Drive** – There are 823 Technology Education Teachers in Missouri Schools and only 235 of them are members of TEAM. The challenge before us is a simple one: if what we do for students is important, then our "flagship" professional organization needs our membership, and our support. I would like to challenge each of you to be proud of what you do and become an active supportive professional member of TEAM.

#### **TE UPDATE MAY 2000**

**Young Inventors** – The Craftsman/NSTA Young Inventors Awards Program challenges students to use creativity and imagination along with science, technology, and mechanical ability to invent or modify a tool. This competition began in 1996. The 2003 Young Inventors Awards Program is open to all students in grades 2-8 in the United States and the U.S. Territories. Students must work independently to conceive and design their tool inventions. The student, with guidance from a teacher-advisor, parent, or significant adult, will design and build a tool. The tool must perform a practical function, including (but not limited to) tools that mend, make life easier or safer in some way, entertain, or solve an everyday problem. For more information go to: http://www.nsta.org/programs/craftsman/.



**ITEA News** – ITEA's IdeaGarden Listserv is a free resource offered to members only, in a. teacher-to-teacher format for those interested in teaching technology. Two outstanding veteran technology teachers, Gary Wynn, DTE and Ron Yuill, DTE, both from Indiana, will field questions, offer ideas, chase resources, and interact with listserv subscribers. <a href="http://www.iteawww.org/J6.html">http://www.iteawww.org/J6.html</a>.



Bright Ideas is a service provided by the International Technology Education Association with the intent of promoting technological literacy in our school systems. This online publication is emailed four times per year FREE to subscribers. <a href="http://www.iteawww.org/brightideasform.html">http://www.iteawww.org/brightideasform.html</a>.



**Technically Speaking --** Technological literacy, a broad understanding of the human-designed world and our place in it, is an essential quality for all people who live in the increasingly technology-driven 21st century. This website explains what technological literacy is, why it's important, and what's being done to improve it. http://www.nae.edu/nae/techlithome.nsf.

**ACTE/TED News** -- Technology Education serves students from Kindergarten through 12th grade. Technology education provides the backbone for technological literacy. Technology education provides the opportunities to integrate science, math, and communication principles in all curriculums. Technology educators teach students curriculum applications using materials and processes associated. Technology education represents current applications of manufacturing, construction, power, energy, transportation, career exploration, and communication. This division includes classroom teachers, teacher educators and state supervisors of technology education. For more information about ACTE/TED go to: <a href="http://www.acteonline.org/about/div-tech.html">http://www.acteonline.org/about/div-tech.html</a>.



### Missouri TSA



State Leadership and Career Development Conference – We are about five months away from our Annual State Conference in Warrensburg, Missouri. The state officer team is preparing some special programs for this year that I think your students will enjoy. All of the information, registration and forms will be on-line at <a href="http://www.dese.state.mo.us/divvoced/teched">http://www.dese.state.mo.us/divvoced/teched</a> mo tsa.htm by early December 2002.

**State Recognition Award Forms** – The "Advisor of the Year" and "Chapter Excellence" Award forms are available in the back of the Technology Learning Activities guides (formerly curriculum guides). The remainder of the Missouri Recognition Awards form is available at <a href="http://www.dese.state.mo.us/divvoced/tsa">http://www.dese.state.mo.us/divvoced/tsa</a> recognition.htm and they are due to the State Advisor by March 1.

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**Trademark Policies Adopted** – The National TSA, Inc., Board of Directors adopted and approved these policies in June 2001 to ensure that the marketing and promoting of TSA is of the highest standards. You can view these policies at <a href="http://www.dese.state.mo.us/divvoced/tsa">http://www.dese.state.mo.us/divvoced/tsa</a> information.htm.

**Now Available!** Due to popular demand, several of the resource documents used during the Annual Fall Leadership Connections Conference are now available on-line. You can find them at <a href="http://www.dese.state.mo.us/divvoced/teched">http://www.dese.state.mo.us/divvoced/teched</a> mo tsa.htm and clicking on "Resources".

Attention State Officer Candidates!!!!! All student TSA members of affiliated chapters need to complete the State Officer "Requirements and Filing" form and mail it to the State Advisor to be <u>postmarked by January 10, 2003</u>. You will find this form at <a href="http://www.dese.state.mo.us/divvoced/teched\_mo\_tsa.htm">http://www.dese.state.mo.us/divvoced/teched\_mo\_tsa.htm</a> and clicking on "Governance".

Leadership Connections Degree Program – There is a self study degree program available on-line to all Missouri TSA students that provides the content, requirements and the application to receive the respective award. They are progressive and the first degree is the "Basic Degree" which is earned at our Annual Fall Leadership Connections Conference. The second degree is the "Academic Degree", the third degree is the "Collegiate Degree" and the fourth degree is the "Scholar Degree". These degrees are available for all Missouri TSA members who have completed of the respective requirements.

For more information go to: <a href="http://www.dese.state.mo.us/divvoced/tsa">http://www.dese.state.mo.us/divvoced/tsa</a> <a href="lcdp.htm">lcdp.htm</a>

Chapter Affiliation Information – The 2002-2003 Chapter Affiliation form is now available on-line in "Fill In PDF Format" at: <a href="http://www.dese.state.mo.us/divvoced/teched">http://www.dese.state.mo.us/divvoced/teched mo tsa.htm</a>. Just click on the button marked "Members". If you have not already processed your chapters' affiliation form, you will need to get it in the mail prior to February 1, 2003 in order for your students to be eligible to attend the upcoming State Conference.

Special Senior Project – "For State Conference, we are preparing a two part power point presentation to recognize all the seniors prior to the Opening Ceremony and the Business Session. We need every senior to send a recent picture of them along with their name, name of high school, and their accomplishments during high school. We ask that advisors mail them by

January 20, 2003 to: (this is not a mandatory activity, but we would like to encourage all seniors to participate)" Allison Cook, Missouri TSA President

Allison Cook Adrian High School PO Box 98 Adrian, MO 64720

Statewide Community Service Project Campaign – The State Officer Team has been hard at work to plan a State-Wide Community Service Project. "It is going to be a teddy bear donation that will be given to a local children's hospital of your choosing. Each chapter should gather as many new teddy bears as possible and donate them (personally if possible) to the local hospital. I urge all of you to take lots of pictures and contact your local television and radio stations to promote your event. We are asking that you complete this project by January 10, 2003 and encourage all chapters to consider this as their holiday service project." Allison Cook, Missouri TSA President.

Please forward your chapters' pictures of this service project to:

Allison Cook or Laura McGowan Adrian High School PO Box 98 Adrian, MO 64720

## **Technology Education Resources**

**DESE Web Resources** – This space will be used for the next several issues to feature a few of the resources now available to all Missouri Technology Education teachers via the DESE web pages. If you have a resource you think would be useful for other Technology Education teachers please forward the web address to <a href="mailto:dese.state.mo.us">dmiller1@mail.dese.state.mo.us</a> along with you contact information and we will do our best to make it available on-line.

**New Teacher Directory** – This is a new feature now available on the Missouri Technology Education web page at <a href="http://www.dese.state.mo.us/divvoced/tech ed index.htm">http://www.dese.state.mo.us/divvoced/tech ed index.htm</a>. The information in the Teacher Directory is public information that was available from DESE Core Data spring 2002 and it is in PDF format with bookmarks and fully searchable by three categories; alphabetically by school name, alphabetically by teacher last name, and alphabetically by the nine TEAM Districts.

**Become a Teacher** – A resource dedicated to provide information to potential and new Technology Education teachers. There are links to University Teacher Preparation Programs, Financial Assistance Opportunities, and Employment Information. This page is designed as a tool for classroom teachers to use with students as a potential recruiting tool. You can find this page at <a href="http://www.dese.state.mo.us/divvoced/tech\_ed\_index.htm">http://www.dese.state.mo.us/divvoced/tech\_ed\_index.htm</a>.

**Tax Deduction for Education Professionals** – A federal tax deduction for teachers, aides, principals, and counselors was signed into law on March 9 as a part of the Bush economic stimulus package. In the past, only teachers who itemized could deduct such expenses. Even educators using the 1040EZ will now be able to take a deduction of up to \$250 a year for out-of-pocket classroom expenses. This tax deduction will be available to teacher during the next tax season. For more information go to <a href="www.irs.gov">www.irs.gov</a> and search for publication 3991.



## **Thoughts for Consideration**

**Did you know......** The following information and interesting facts were copied from the "Did you know?" web site. These facts and many others can be found at: <a href="http://www.didyouknow.cd/index.html">http://www.didyouknow.cd/index.html</a>.

"The first fax process was patented in 1843 by Alexander Bain, but fax machines went into service only in 1964. In 1888, Frank Sprague completed an electric railway, but electric locomotives were introduced only in 1895. Eugene Ely landed a plane on a boat in 1911, but aircraft carriers weren't perfected for another 20 years."

"The first parachute jump was made from a hot air balloon by Andre-Jacques Garnerinthe in France in 1793. Leonardo da Vinci made detailed sketches of parachutes in 1485. He also sketched studies for a helicopter, a tank and retractable landing gear. The first helicopter that could carry a person was flown by Paul Cornu in 1907. Tanks were first used during World War One in Cambrai, France in 1917. The first airplane with retractable landing gear was built in 1933. Da Vinci also suggested underwater breathing methods. Jacques-Yves Cousteau and Emile Gagnon introduced scuba diving only in 1943, 458 years later."

"Heron of Greece invented steam power in 50 BC. But the leaders of the day thought that it would cause unemployment which may lead to unrest and the invention ran out of steam. The steam engine reappeared again only in 1698 when Thomas Savery invented a steam pump. The first practical steam engine was the atmospheric machine of Thomas Newcomen in 1701. It was used to operate pumps on coal mines. In 1804, English inventor Richard Trevithick introduced the steam locomotive in Wales. In 1815, George Stephenson built the world's first workable steam locomotive."

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"The computer was launched in 1943, more than 100 years after Charles Babbage designed the first programmable device. Babbage dropped his idea after he couldn't raise capital for it. In 1998, the Science Museum in London, UK, built a working replica of the Babbage machine, using the materials and work methods available at Babbage's time. It worked just as Babbage had intended."

"The amount of time that people spend on travel has been consistent at 1,1 hours per person per day in all societies."

"Traffic jams of New York, San Francisco and Paris are well known - beaten only by those in Seattle where a driver annually spends 59 hours stuck in traffic."

"Traffic jams are nothing new. In 45 BC, Rome banned all vehicles from within the city - and in other cities vehicles, including horses, were allowed only at night... because of traffic jams."

"Traffic lights were used before the advent of the motorcar."

"The usual thermal efficiency of reciprocal steam engine is 15%. That of steam turbine is over 40%."

"Nuclear ships are basically steamships and driven by steam turbines. The reactor just develops heat to boil the water."

"The practice of eating insects is called entomophagy Most insects are edible. According to eatbug.com, there are 1,462 recorded species of edible insects. And they're quite nutritious. For instance, 100 grams of cricket contains only 121 calories, less than half of beef. A cricket contains only 5,5 grams of fat, compared to 21,2g of beef. Beef contains more protein (23,5g - a cricket 12.9g) but the 100g of cricket also contains 5,1g of carbohydrates, 75,8 mg calcium, 185,3 mg phosphorous, 9,5 mg iron, thiamin, riboflavin, and niacin."

"The device at the intersection of two railroad tracks to permit the wheels and flanges on one track to cross or branch for the other is called a frog."

"The thin line of cloud that forms behind an aircraft at high altitudes is called a contrail."

"A depth of 2 fathoms (3,6 metres) is called a Mark Twain. Originally a fathom was the space reached by with two arms outstretched."

"In the early days of film making, people who worked on the sets were called movies. The films were called potion pictures."

"What is often returned but never borrowed?

"What is broken when you name it?

"What is it that someone else has to take before you can get it?

Thanks"

Silence"

Photograph"



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